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(71) Applicant (for all designated States except US):
WILLIAM MARSH RICE UNIVERSITY [US/US];
6100 Main Street, Houston, TX 77005 (US).

(71) Applicants and

(72) Inventors: **CONRAD, Pamela, G.** [US/US]; 5791 Cameo Street, Alta Loma, CA 91701 (US). **ADLEMAN, Leonard** [US/US]; Department of Computer Science - SAL 316, Mail Code 0782SAL200, 941 West 37th Place, Los Angeles, CA 90089-0781 (US).

(72) Inventors; and

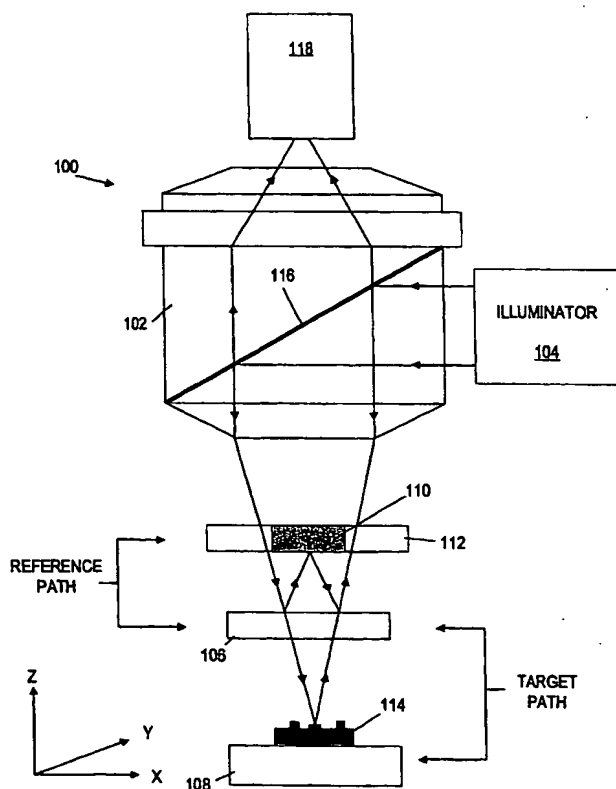
(75) Inventors/Applicants (for US only): **LUTTGE, Andreas** [DE/US]; 21211 Ganton Drive, Katy, TX 77450 (US). **SAWYER, Dale, S.** [US/US]; 1424 Missouri Street, Houston, TX 77006 (US).

(74) Agents: **WATKINS, Marcella, D.** et al.; Conley Rose, P.C., P.O. Box 3267, Houston, TX 77253-3267 (US).

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[Continued on next page]

(54) Title: NON-DESTRUCTIVE OPTICAL IMAGING SYSTEM FOR ENHANCED LATERAL RESOLUTION



(57) Abstract: In some embodiments, an optical imaging system (100) comprises a non-destructive optical device (102) that obtains information concerning a target object (114) and a X,Y positioning system (108) that is capable of positioning one or both of the target object and the optical device to pre-determined offset locations more closely spaced than the obtainable resolution of the optical device. A first "base" image is produced and then overlapping additional images may be produced by the positioning of one or both of the target object and the optical device to the pre-determined locations. The first image and the additional images may be combined to produce a single combined image that contains inherently more information than the first image or any of the additional images alone. The combined image then may be digitally restored and enhanced to produce an image with a greater resolution than the optical device yields.

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A. CLASSIFICATION OF SUBJECT MATTER												
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C. DOCUMENTS CONSIDERED TO BE RELEVANT												
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.										
X	US 5,208,451 A (DECK) 04 May 1993 (04.05.1993), Fig. 1.	1, 11, 14, 16										
X	US 6,028,670 A (DECK) 22 February 2000 (22.02.2000), Fig. 1.	1, 11, 14, 16										
A	US 6,493,093 B2 (HARASAKI et al) 10 December 2002 (10.12.2002), see entire document.	1-18										
A	US 5,914,782 A (SUGIYAMA) 22 June 1999 (22.06.1999), see entire document.	1-18										
<input type="checkbox"/> Further documents are listed in the continuation of Box C. <input type="checkbox"/> See patent family annex.												
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"P" document published prior to the international filing date but later than the priority date claimed												
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Name and mailing address of the ISA/US Mail Stop PCT, Attn: ISA/US Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450 Facsimile No. (703) 305-3230		Authorized officer Frank G Font Telephone No. 703-308-0935										

INTERNATIONAL SEARCH REPORT

International application No.

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B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 356/511, 500, 501, 512, 516

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
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Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
NONE

C. DOCUMENTS CONSIDERED TO BE RELEVANT

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Mail Stop PCT, Attn: ISA/US
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

Facsimile No. (703) 305-3230

Authorized officer

Frank G Font

Telephone No. 703-308-0935